

Remarks:

Applicant is encouraged by the indication of allowability of the claims of the present application over the prior art. Applicant also would like to thank the Examiner for the various observations and suggestions for changes to the specification and claims to eliminate any antecedent or support problems that remain in this application. In response thereto, applicant has amended this application in a manner that is believed to fully address all of the remaining issues. The subscribing attorney of record would welcome a telephone conference with the Examiner should there need to be further correction to the application.

Specifically, in response to the Official Action of March 29, 2004, the applicant has submitted herewith a new first sheet of formal drawings that adds the caption "Prior Art" to Figure 1. Applicant also submits herewith a new third sheet of formal drawings that adds a laser source 67 to Figure 5. Applicant requests that the Examiner reconsider and withdraw his suggestion to also add that same caption to Figure 3. Applicant further requests that the Examiner reconsider and withdraw the requirement for any further change to the figures of this application.

Applicant agrees that Figure 1 could be taken to illustrate the prior art in that it illustrates an unsatisfactory solution to the problem considered by the Applicant that has been tried. By "un-focusing" the optics of a probe coupled to a spectrometer one can reduce the power density delivered to any given point on a sample from the illuminating laser or other energy source. However the "un-focused" optics fails to deliver sufficient Raman signal to the spectrometer to permit identification of the sample. Accordingly, Applicant submits herewith a single sheet of drawings containing Figures 1 and 2, both of which are now designated as "Prior Art".

Figure 3, on the other hand, does not illustrate the prior art. It is instead a schematic drawing of a hypothetical construction illustrating what happens if the objective lens is displaced laterally with respect to the normal optical axis of the Raman probe. Figure 3 can be considered to illustrate the invention at one instant in time when a moving objective lens is laterally displaced. While it is possible, or even probable, that someone has misaligned the optical elements of a Raman probe, it certainly was not an intentional event designed to illicit a desirable result. Figure 3 certainly can be considered as hypothetical, but it is not really illustrative of any known prior art device, and should not be so characterized.

Figure 5 has been modified to add a structure corresponding to the laser source disclosed on page 6, line 25 of the application as originally filed. Applicant has modified the text at page 6, line 25 to add the reference numeral 67 after the existing words laser source. Applicant believes that the present figures of this application already illustrate every other feature of the invention specified in the claims, and fully comply with 37 C.F.R. § 1.83. The text of the present application indicates that the present invention is an improvement on an existing device, e.g., that disclosed in co-pending application S/N 09/447,878, filed November 23, 1999, now U.S. Patent 6,310,686, which was incorporated by reference in the present application (page 7, lines 12-15). As a result, the drawings of the present application merely need to satisfy 37 C.F.R. § 1.83(b).

Looking at the existing figures, the laser schematically shown in Figures 2-4 and 7 would be recognized by those skilled in the art as “a light source of known wavelength and deviation” as used in claims 1 and 33, as amended. On the basis of the existing description of their operation in the present application the Holographic Notch Filter (HNF) shown in Figures 2-4 and 7, and the band pass filter 48, particularly as discussed on page 5, lines 25-27, would define the wavelength and deviation characteristics of the light being directed to the sample.

Page 5 of the specification has been amended to insert the word “and” that was inadvertently omitted from that portion of the description, and to add a new reference numeral as indicated above. While no further amendment to the specification is believe to be necessary to comply with 35 U.S.C. § 112, the subscribing attorney is willing to consider any further suggestion from the Examiner. As to claims 4, 21, 26, and 33, applicant has amended the language of the claims to more positively state the reflecting and blocking actions of the filter 76 described in the paragraph bridging pages 6 and 7 of the specification.

On the basis of the original Figure 5 and the accompanying description, the optical elements including mirror 50 and objective lens 54 could be understood by those skilled in the art as “radiation optics optically coupling the light source to the housing optical window” as used in claim 6. (See, e.g., the description on page 6 lines 27-31.) On the basis of the original Figure 5 and the accompanying description, the band pass filter 48 which is shown spaced from the exit end 41 of the optical fiber 66, and all of which are within the housing member 22, could be understood by those skilled in the art as a “band pass filter situated in the housing in a spaced relation from the light source” as used in claims 10, 24 and 26. On the basis of the original Figure 5 and the accompanying description, the exit end 41 of the optical fiber 66 which is located within the housing member 22 could be understood by those skilled in the art as a “light source”, the light being regulated by the band pass filter 48 to a “known wavelength and deviation situated within the probe” as used in claim 16. On the basis of the original Figure 5 and the accompanying description, the baffling tube 47, lens 36, band pass filter 48, and mirror 50 could be understood by those skilled in the art as “radiation optics coupled to the light source” as used in claims 1, 16, 26 and 33. To further assist the understanding of the description, a change to Figure 5 has been made to add a laser source 67 coupled to optical fiber 66 based on the original text of page 6, line 25.

Applicant has submitted a substitute Abstract of the Disclosure that is believed to correct the errors and omissions observed by the Examiner. Again, the subscribing attorney of record would welcome any suggestion of the Examiner for any additional change to the Abstract.

Since the applicant has merely retained claims indicated by the Examiner to be allowable over the prior art, no comments on the prior art of record are believed to be necessary. With this amendment and the submission of substitute drawings conforming to the requirements of the U.S. Patent and Trademark Office, this application is ready to be passed to issue. While no fees are believed to be necessary with this amendment, the Commissioner is hereby authorized to charge any deficiency or defect, and to credit any overpayment, to Deposit Account # 23-1925.

Respectfully submitted,



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